

FIG. 3

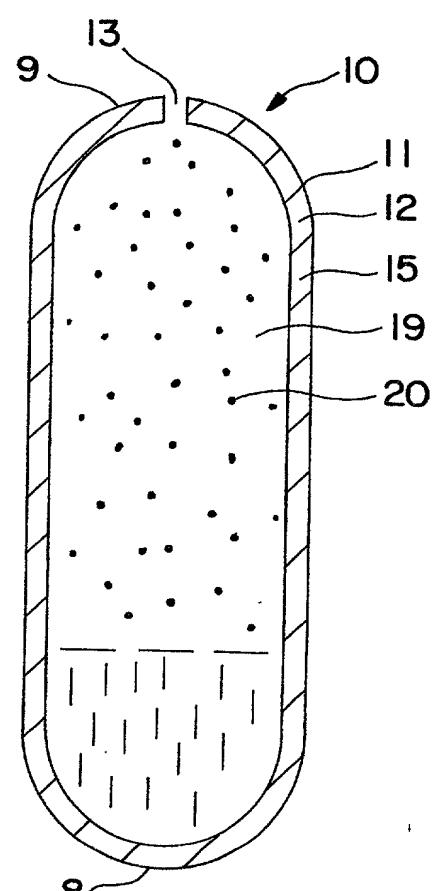
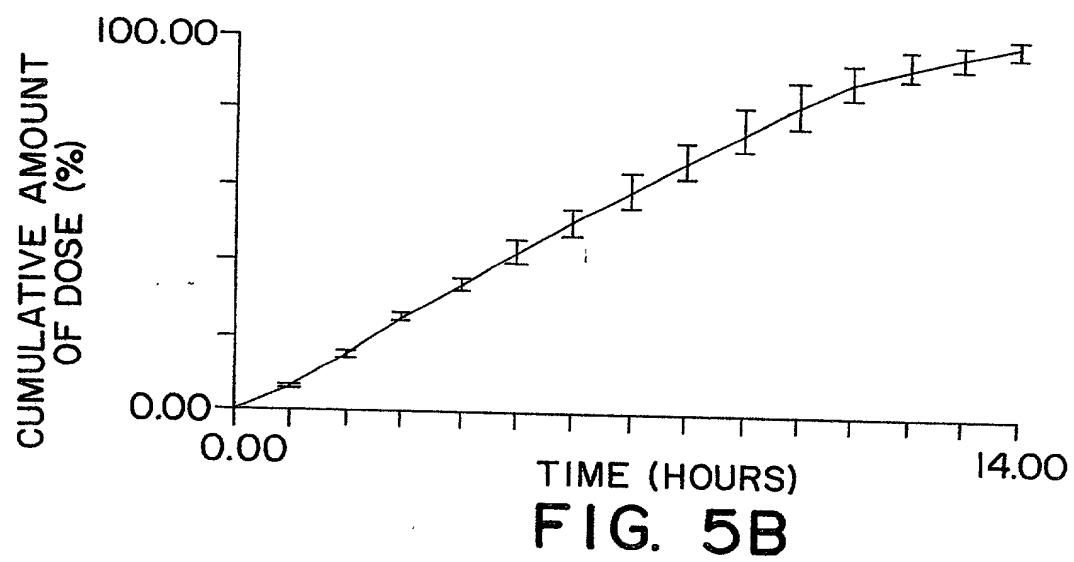
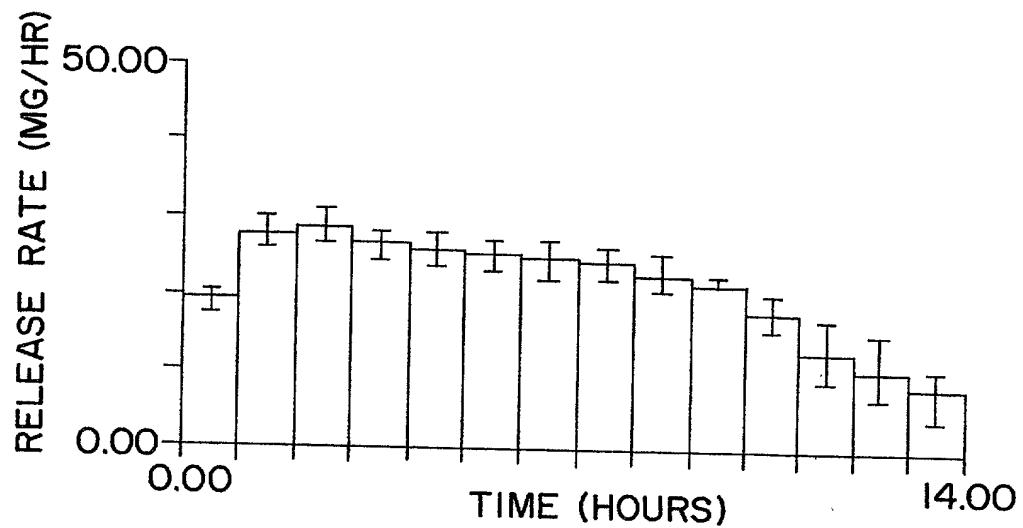


FIG. 4



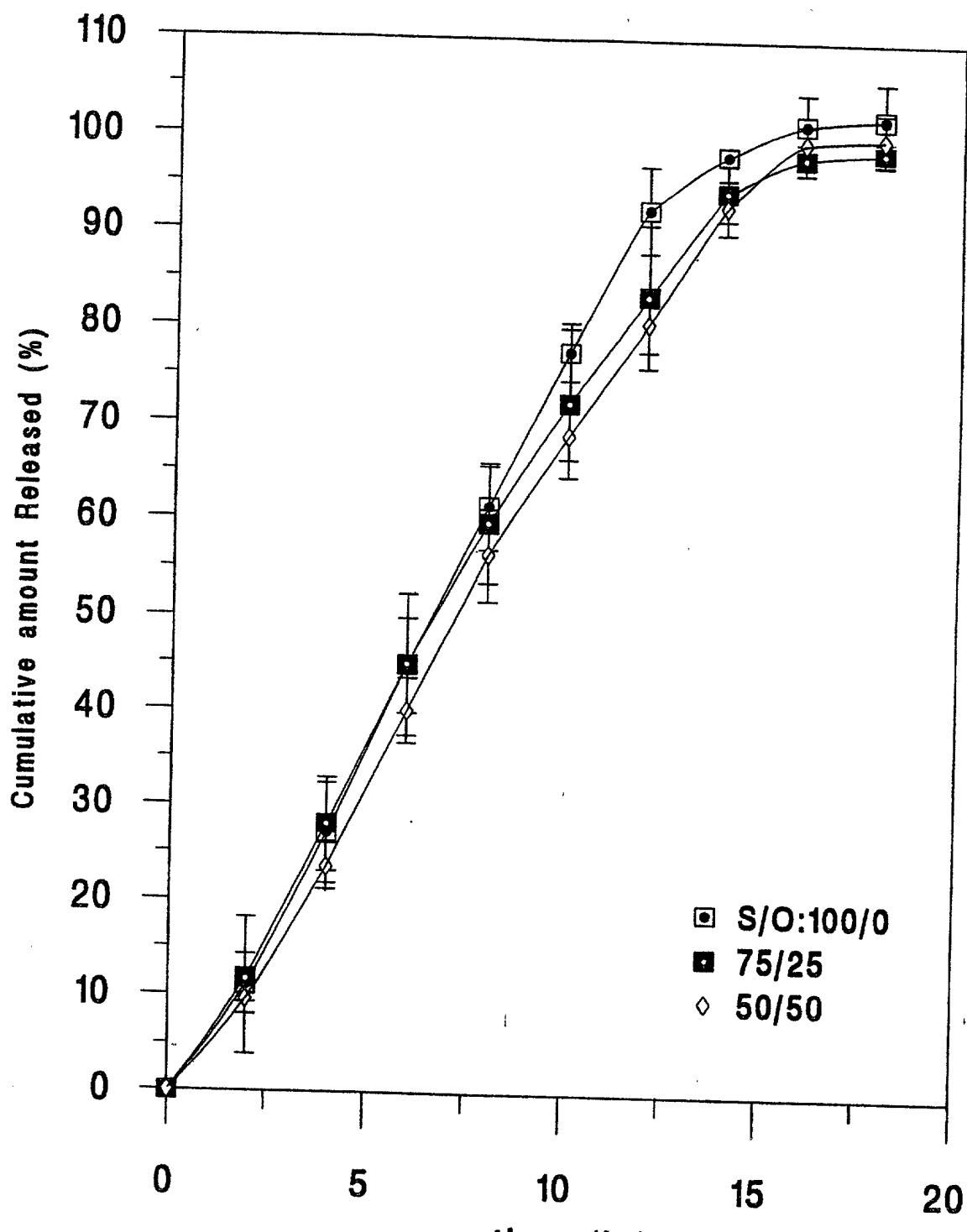


FIG. 6

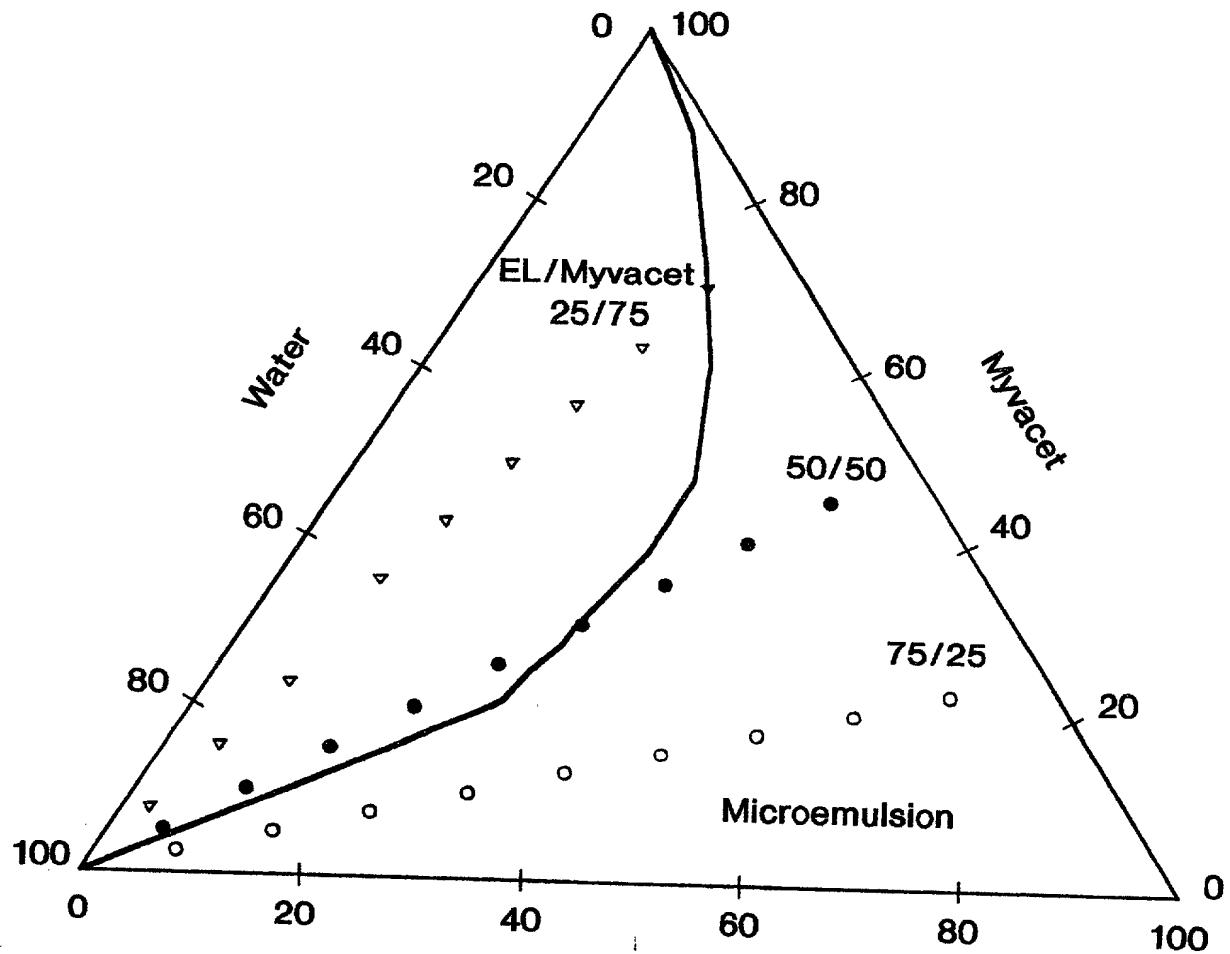


FIG. 7

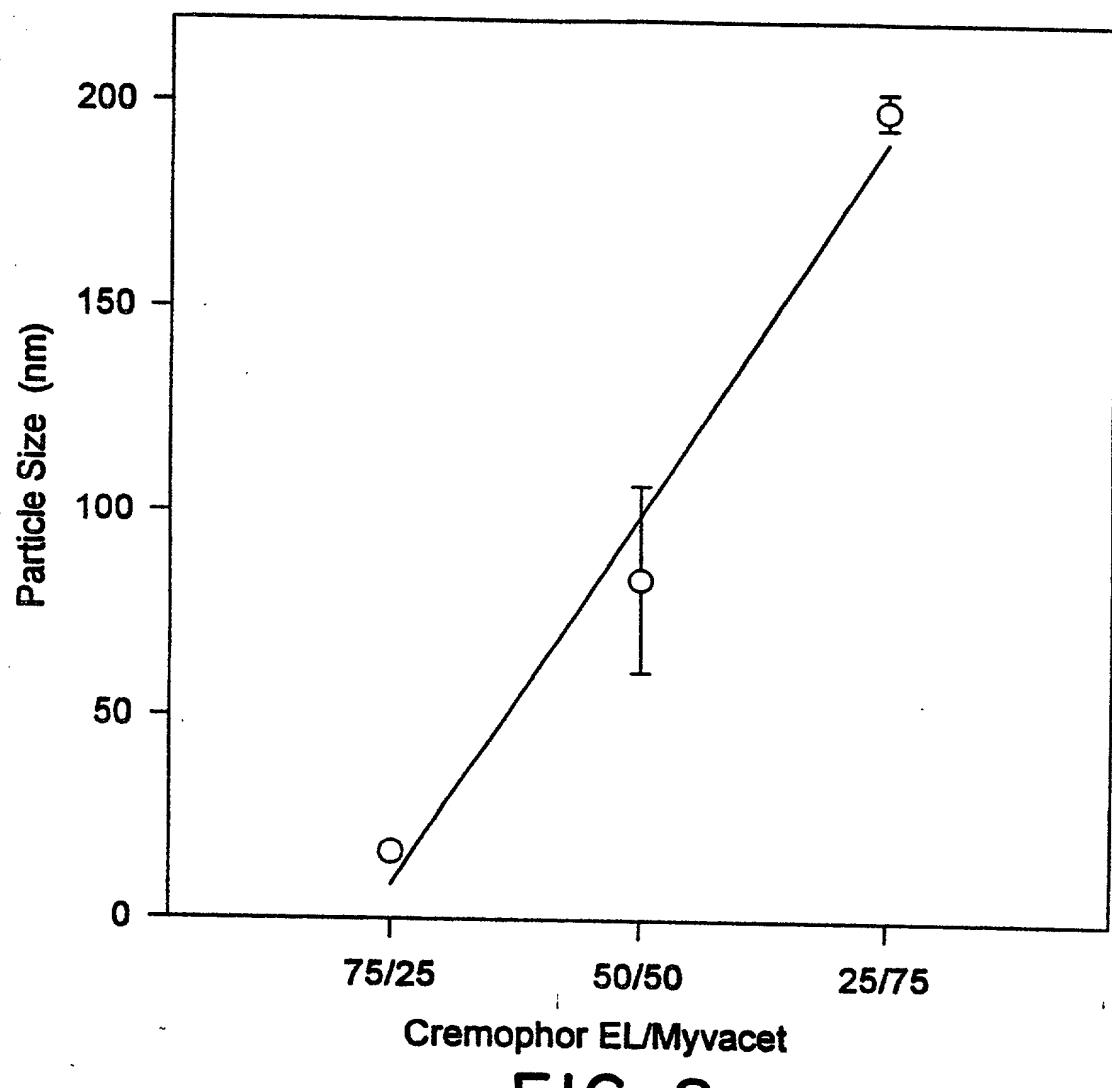
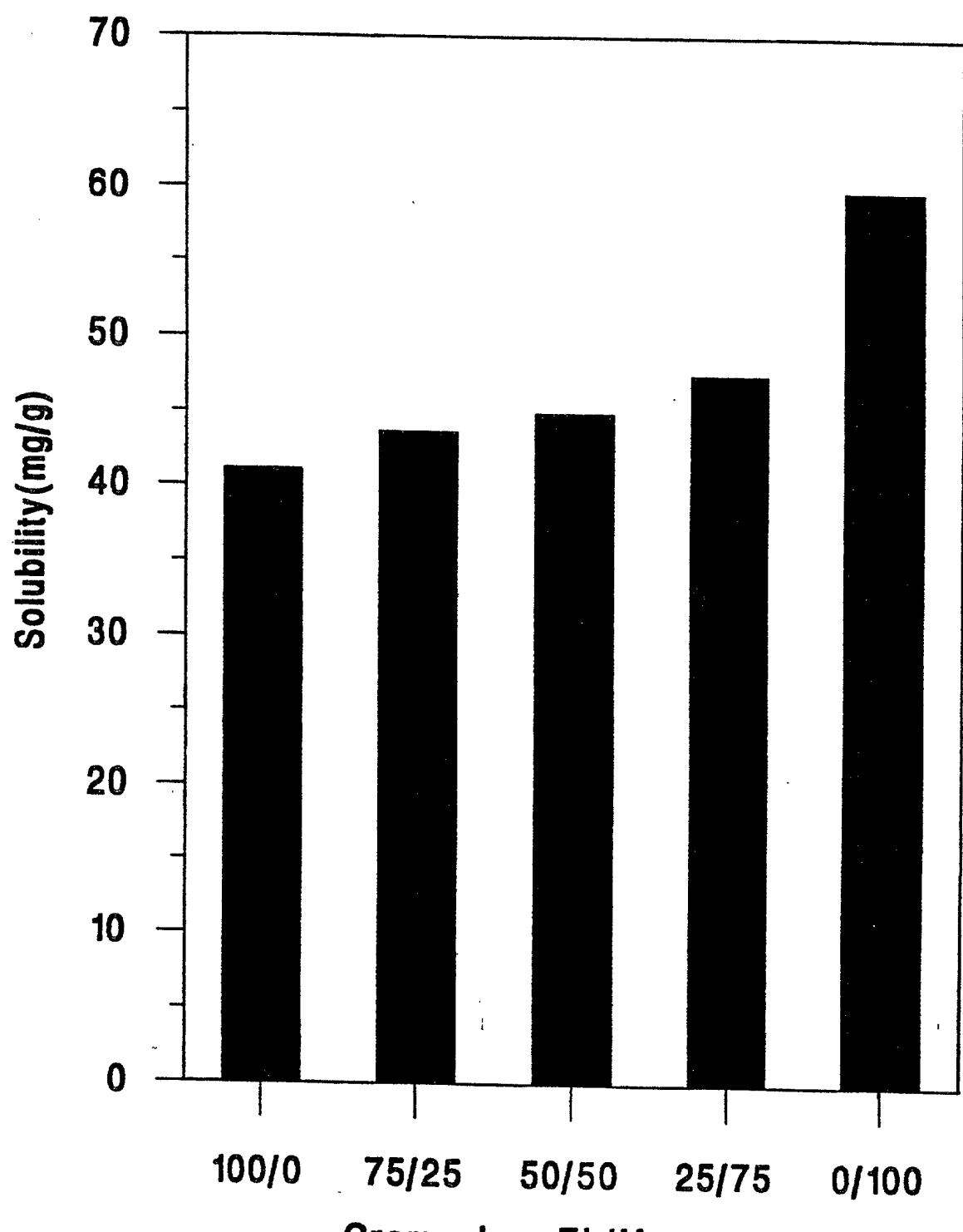


FIG. 8



Cremophor EL/Myvacet

FIG. 9

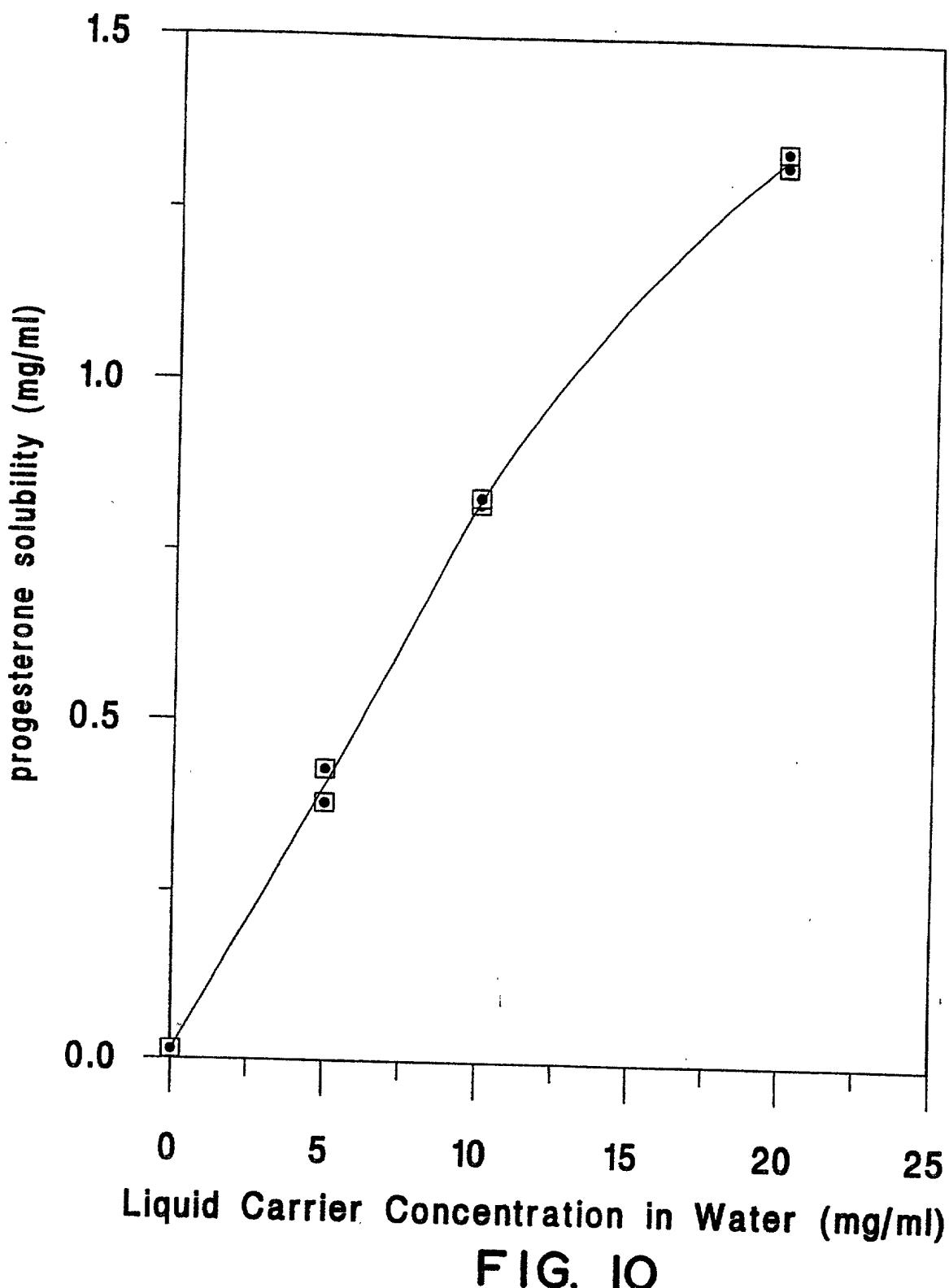


FIG. 10

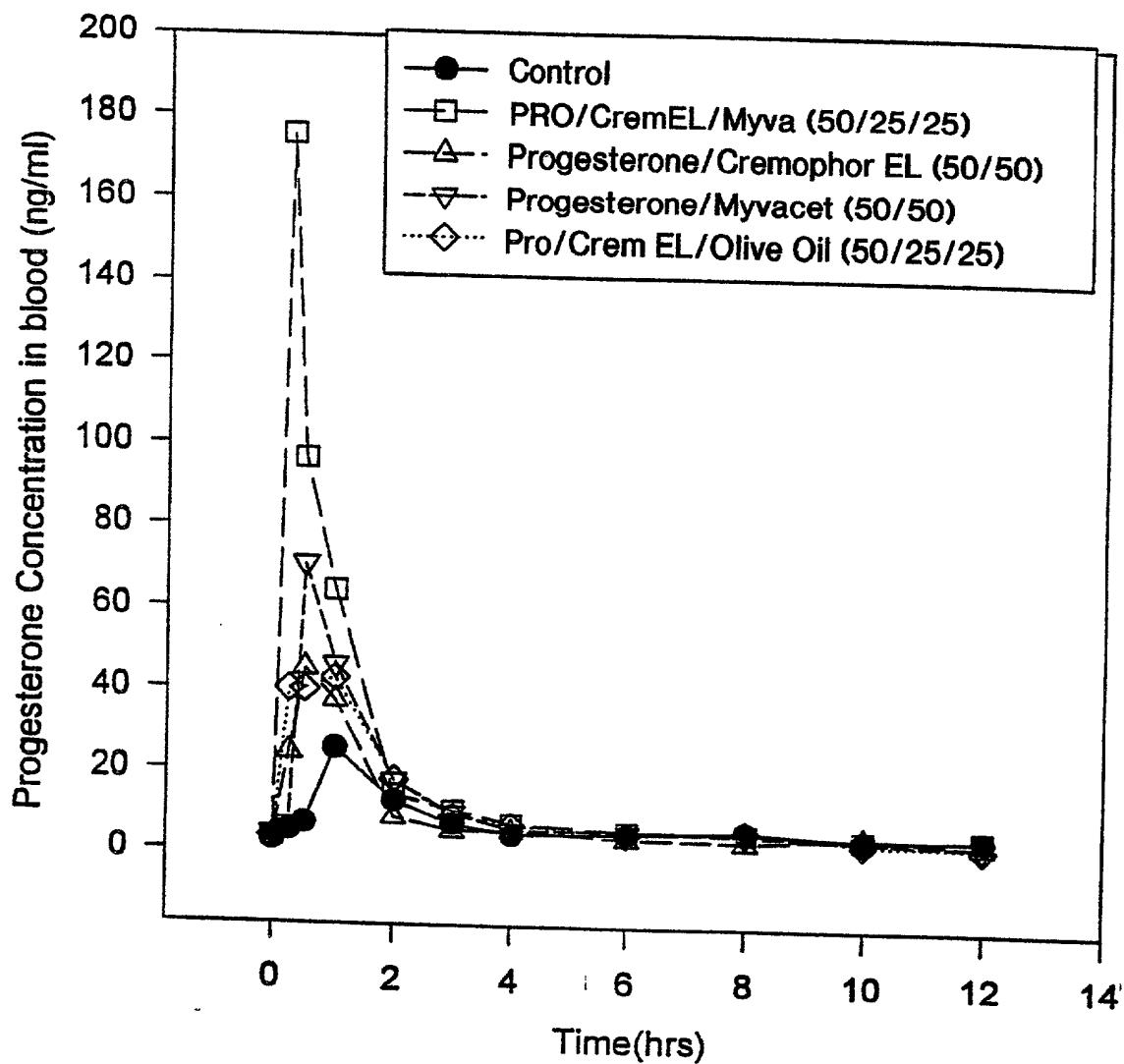


FIG. II

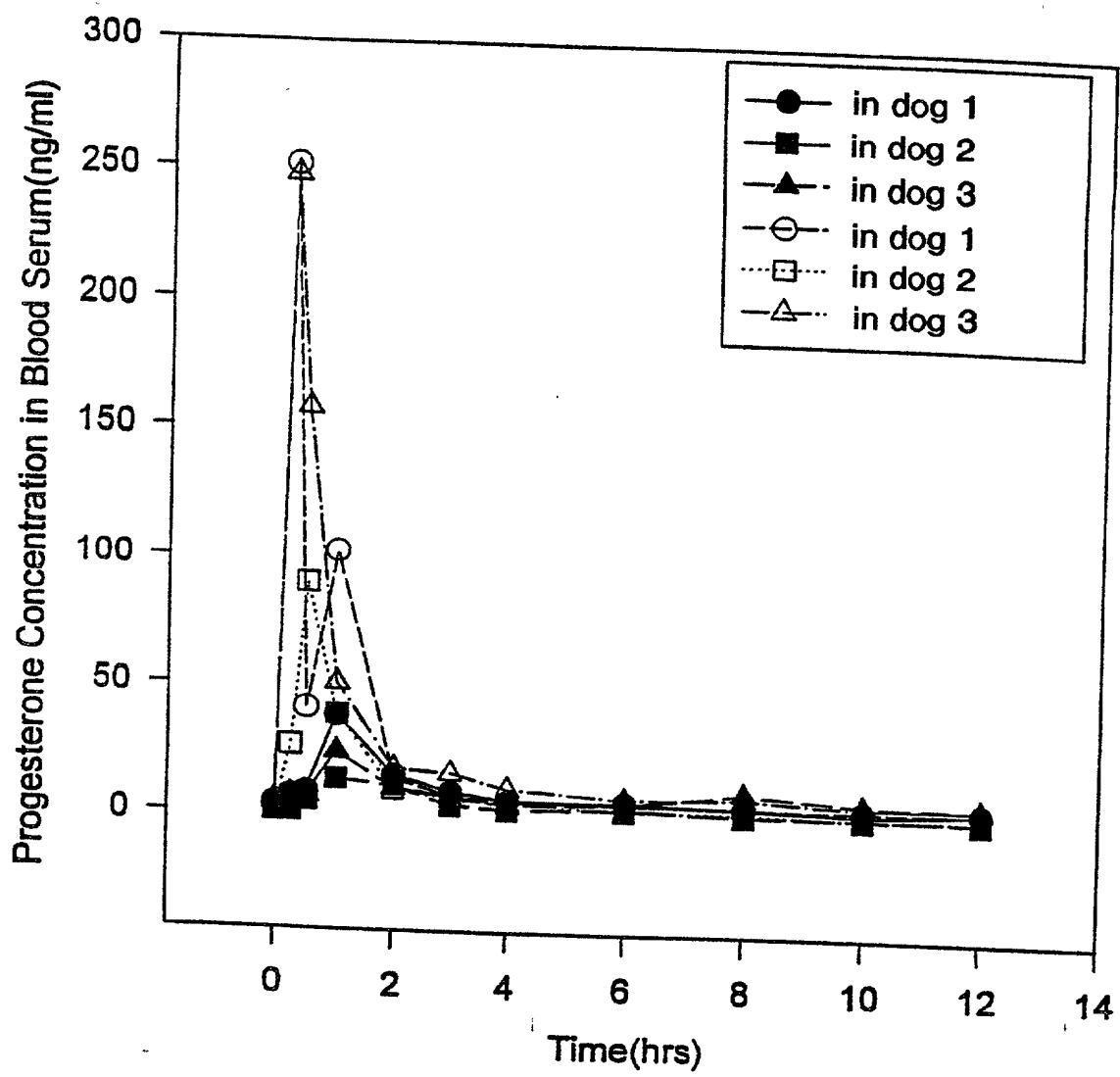


FIG. 12

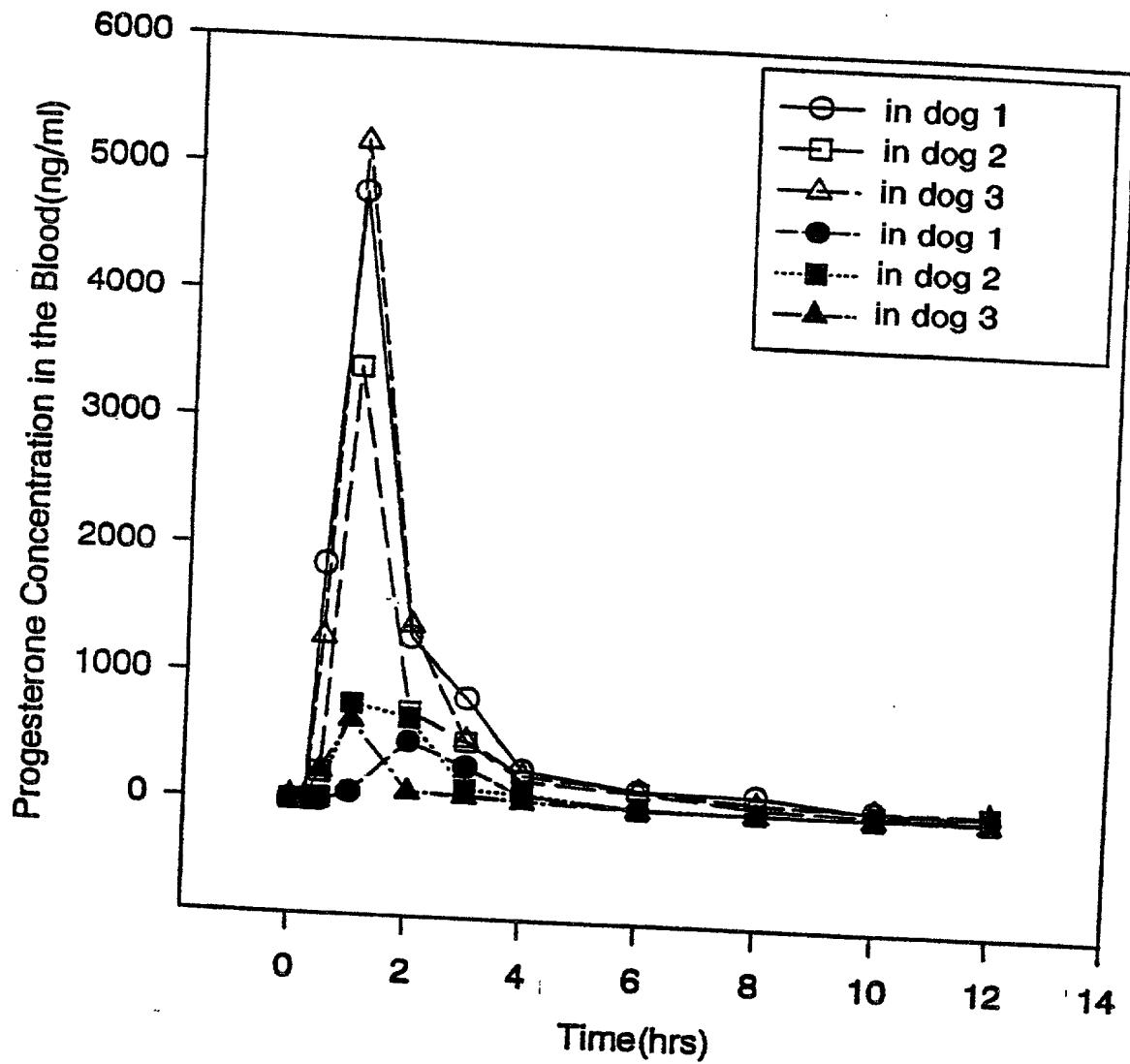


FIG. 13

**Pharmacokinetic Data for Oral Progesterone
Formulations Dosed to Dogs (40mg)**

Formulation #	T _{max} (h)			C _{max} (ng/ml)			AUC (ng/ml*h)	*Relative BA % Average (s.d.)	
	Dog 1	2	3	Avg	Dog 1	2	3		
1	1	1	1	1	38.4	13.9	24.4	25.6(12.3)	104
2	0.25	0.50	0.25	0.33	252	90.8	248	197(92)	226
3	0.50	0.25	0.50	0.42	53.4	57.7	33.7	48.3(12.8)	109
4	0.5	1	1	0.83	174	57.1	30.4	87.2(76.4)	167
5	0.5	1	0.25	0.58	57.2	70.8	74.7	67.5(9.1)	114

AUC is calculated by trapezoidal rule from time zero to the last blood sampling point (12h).
The relative bioavailability is the ratio of AUC for liquid formulations to that for laqueus drug-layer formulation.

Formulation Composition (wt%)

Components	Formulation #				
	1	2	3	4	5
Progesterone	60	4	3	4	5
Mannitol	21				
Ac-di-sol	10				
Myji 52-s	5				
HPMC E-5	3				
Mg stearate	1				
Cremophor EL					
Myvacet 9-45					
Olive oil					
	48	96	96	48	48
	48				

FIG. 14

Pharmacokinetic Data for Emulsion Progesterone Formulation and
Nonemulsion Push-Pill Drug-Layer Formulation (300mg dose)

Formulation #	T _{max} (h)			C _{max} (ng/ml)			AUC (ng/ml*h)			Relative BA (%) Average (s.d)		
	Dog 1	2	3	Avg	Dog 1	2	3	Avg (s.d)	Dog 1	2	3	Avg (s.d)
Nonemulsion	2	1	1	1.33	489	778	649	639(145)	1101	1715	898	1238(425)
Emulsion	1	1	1	1	4800	3420	5180	4467(926)	7715	4708	7418	6614(1657)

AUC is calculated by trapezoidal rule from time zero to the last blood sampling point (12h).

The relative bioavailability is the ratio of AUC for liquid formulations to that for MPA-22 drug-layer formulation.

Components	Formulation Composition (wt%)		
	Nonemulsion Drug-Layer	Emulsion Oral Formulation	Emulsion Oral Formulation
Progesterone	60		
Mannitol	21		
Ac-di-sol	10		
Myjii 52-s	5		
HPMC E-5	3		
Mg stearate	1		
Cremophor EL		12.5	
Myvacet 9-45			25.0
			12.5

FIG. 15